

CLAIMS

1-3. (Canceled)

4. (Previously Presented) The method of claim 21, further comprising:
providing said knuckle having a bearing retention structure formed therein.

5. (Original) The method of claim 4, wherein said bearing retention structure is a generally circular bore formed in said knuckle.

6. (Original) The method of claim 5, further comprising:
snap-fitting a bearing having an inner race and an outer race into said bore.

7. (Original) The method of claim 6, wherein said bearing is located in said bore between a lower shoulder portion and an upper snap ring.

8-10. (Canceled)

11. (Previously Presented) The method of claim 23, wherein said brake rotor is secured to said hub by a plurality of wheel bolts passed through a respective one of said plurality of bolt receiving holes.

12. (Canceled)

13. (Canceled)

14. (Previously Presented) The method of claim 25, further comprising:
finishing said at least one hub outer surface prior to securing said brake rotor to said assembly.

15. (Canceled)

16. (Previously Presented) The method of claim 26, further comprising:
press-fitting a wheel bolt into each of said plurality of bolt receiving holes prior to said step of finishing.

17-19. (Canceled)

20. (Previously Presented) The method of claim 24, wherein parallelism between said at least one surface of said brake rotor and a plurality of brake caliper ears is maintained.

21. (Currently Amended) A method of finishing a brake rotor assembly, the method comprising:

providing a knuckle, a brake rotor, and a hub;

assembling said knuckle, said brake rotor, and said hub together to form an assembly;

clamping said assembly in a fixture;

finishing at least one surface of said brake rotor to reduce lateral run-out of said surface of said brake rotor to less than 14µm wherein the assembly is clamped in the fixture during the finishing of the brake rotor wherein the finishing occurs ~~during manufacture~~ prior to mounting of the said brake rotor assembly to a vehicle.

22. (Previously Presented) The method of claim 21, wherein said hub comprises a flange portion.

23. (Previously Presented) The method of claim 22, further comprising:
forming a relief channel in a face of said flange portion and forming a plurality of bolt receiving holes in said relief channel.

24. (Currently Amended) A method of manufacturing a brake assembly, said method comprising:

providing a knuckle, a brake rotor, and a hub;
assembling said knuckle, said brake rotor, and said hub together to form an assembly;
fixing said assembly to a fixture wherein said hub is driven such that said hub and said brake rotor rotate with respect to said knuckle; and
finishing at least one surface of said brake rotor to reduce lateral run-out of said surface of said brake rotor wherein the rotor is finished while assembled to the knuckle and the hub and further wherein the finishing occurs ~~during manufacture~~ prior to mounting of the said brake rotor assembly to a vehicle.

25. (Previously Presented) The method of claim 24, wherein finishing said at least one surface of said brake rotor to reduce lateral run-out of said surface comprises finishing said surface to have lateral run-out of less than 14 μ m.

26. (Previously Presented) The method of claim 24, wherein reducing run-out of said brake rotor minimizes lateral run-out to one or more brake pads.

27. (Currently Amended) A method of finishing a brake rotor, said method comprising:
providing a knuckle, a hub, and a brake rotor, said brake rotor having an outer contact surface and an inner contact surface;
assembling said knuckle, said hub, and said brake rotor to form a brake rotor assembly;
securing said brake rotor assembly;
rotating said brake rotor with respect to said knuckle;
finishing said inner and outer contact surfaces of said brake rotor to have lateral run-out of less than 14 μ m while the brake rotor is assembled to the knuckle and the hub wherein the finishing occurs ~~during manufacture~~ prior to mounting of the said brake rotor assembly to a vehicle.

28. (Previously Presented) The method of claim 27, further comprising:
controlling the distance between said inner contact surface and an inner brake caliper between said outer contact surface and an outer brake caliper.

29. (Previously Presented) The method of claim 27, further comprising:

controlling parallelism between said inner contact surface and an inner brake caliper and between said outer contact surface and an outer brake caliper.

30. (Withdrawn) A brake assembly comprising:

a knuckle;

a hub positioned in rotational communication with said knuckle;

a flange face on said hub;

a brake rotor secured to said flange face of said hub, said brake rotor having at least one surface with reduced lateral run-out of less than 14 μ m.

31. (Withdrawn) The brake assembly of claim 30, wherein said brake rotor further comprises an inner contact surface and an outer contact surface.

32. (Withdrawn) The brake assembly of claim 31, further comprising a brake caliper disposed adjacent to said brake rotor, wherein said brake caliper includes a first caliper pad and a second caliper pad.

33. (Withdrawn) The brake assembly of claim 32, wherein said first caliper pad contacts said inner surface of said brake rotor and said second caliper pad contacts said outer surface of said brake rotor.